

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Previously Presented) A method for transmitting frames between switches in a fibre channel network, comprising:

5 determining priority for a plurality of frames based on a hop count for each frame, where a frame with a lesser hop count has a higher priority than a frame with a greater hop count;

placing the frames in a plurality of priority queues, where each priority queue is dedicated to frames having similar priorities; and

10 selecting frames for transmission based on each frame's priority;

wherein higher priority frames are selected before lower priority frames until a threshold number of higher priority frames have been selected, after which at least one lower priority frame is selected if lower priority frames are pending.

15 2. (Previously Presented) The method of Claim 1, where a counter in each priority queue maintains a count of frames selected from that queue, and lower priority frames may be selected after the counter reaches the threshold number.

3. (Canceled)

4. (Previously Presented) A system for transmitting fibre channel frames, comprising:

20 a fibre channel switch with a transmit port, the transmit port having at least two priority queues for placing frames with different priorities, where a frame's priority is based on a hop count that is in turn based upon the frame's destination;

a counter associated with each queue, each counter being configured to count frames transmitted from its associated priority queue; and

25 a credit control module configured to determine whether sufficient credit is available before sending a particular frame.

5. (Previously Presented) The system of Claim 4, wherein frames with higher hop counts have lower priority than frames with lower hop counts.

30 6. (Previously Presented) A fibre channel switch having a transmit port for transmitting frames, comprising:

at least two priority queues for placing frames with different priorities, where a frame's priority is based on a hop count that is in turn based upon the frame's destination;

a counter associated with each queue, each counter being configured to count frames transmitted from its associated priority queue; and

5 a credit control module configured to determine if sufficient credit is available before sending a particular frame.

7. (Previously Presented) The fibre channel switch of Claim 6, wherein frames with higher hop counts have lower priority than frames with lower hop counts.

8.-13. (Canceled)

10 14. (Previously Presented) The method of Claim 1, further comprising the step of sending the selected frame if sufficient credit is available.

15 15. (Previously Presented) The method of Claim 1, further comprising the step of sending the selected lower priority frame if a sum of empty receive buffers at a destination port and receive buffers at the destination port that are filled with higher priority frames is greater than or equal to the hop count for the selected lower priority frame.

20 16. (Previously Presented) The system of Claim 4, wherein for lower priority frames the credit control module is configured to determine that sufficient credit is available when a sum of empty receive buffers at a destination port and receive buffers at the destination port that are filled with higher priority frames is greater than or equal to the hop count for the selected lower priority frame.

25 17. (Previously Presented) The fibre channel switch of Claim 6, wherein for lower priority frames the credit control module is configured to determine that sufficient credit is available when a sum of empty receive buffers at a destination port and receive buffers at the destination port that are filled with higher priority frames is greater than or equal to the hop count for the selected lower priority frame.

18. (Previously Presented) The system of Claim 8, further comprising means for determining whether a sum of empty receive buffers at a destination port and receive buffers at the destination port that are filled with higher priority frames is greater than or equal to the hop count for the selected lower priority frame.